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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,446

12/13/2005

Ralf Muehlhausen

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11/15/2007

HANLEY, FLIGHT & ZIMMERMAN, LLC

150 S. WACKER DRIVE

SUITE 2100

CHICAGO, IL 60606

EXAMINER

ELAADIL, LAHCEN

ART UNIT

PAPER NUMBER

4114

MAIL DATE

DELIVERY MODE

11/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/560,446	Applicant(s) MUEHLHAUSEN ET AL.	
	Examiner Lahcen elaadil	Art Unit 4114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/13/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/13/2005 and 06/11/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In response to the Preliminary Amendment filed on December 13, 2005, claims 1-16 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2, 6 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase “lapped on the side located opposite the G-rotor” is unclear, confusing and indefinite. It is not understood which side represents the opposite of the G-rotor (in regard to claims 2 and 9). Yet, it is not understood which side of the cover and the bottom faces the G-rotor (in regard to claim 6). In addition, it is not understood whether the term “lapped on”, in this instance, refers to facing, overlapping, coinciding, or any other meaning. It is the Examiner’s position to interpret the meaning of the claims as the inner faces of the cover and the bottom coincide with the planar surfaces of the G-rotor.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1, 2, 4-9, 11 and 13-16 are rejected under 35 U.S.C. 102(b) as anticipated by Schelhas et al. (US Pat. No. 6,095,771).

Regarding claims 1, 4 and 5, Schelhas et al. teach in figures 1, 3, and 4, a positive displacement fuel pump (flow pump 11) for a motor vehicle, comprising a G-rotor (impeller 12) arranged between a bottom (intermediate housing 21) and a cover (intake cap 16) and a spacer (see extended lip of the intermediate housing 21) arranged between the bottom and the cover, wherein the bottom or the cover is manufactured from plastic. In addition, the pump comprises an electric motor (electric drive motor) having a shaft, wherein the shaft is attached to the G-rotor. *See specification column 2 - lines 48-53; and column 3 - lines 6-16.*

Regarding claims 2 and 9, Schelhas et al. teach in figures 1, 3, and 4, that the bottom (intermediate housing 21) or the cover (intake cap 16) is lapped on the side located opposite the G-rotor (impeller 12).

Regarding claim 6, Schelhas et al. teach in figures 1, 3, and 4, that the bottom is lapped on the side facing the G-rotor, and that the cover is lapped on the side facing the G-rotor.

Regarding claims 7 and 8, Schelhas et al. teaches in the disclosure that the bottom (intermediate housing 21) and/or cover (intake cap 16) have/has a high quality coating (*See specification column 3 - lines 6-39*).

Regarding claim 11, Schelhas et al. teach in figures 1, 3, and 4, that the cover (intake cap 16) is located on the side of the G-rotor (impeller 12) opposite the electric motor (electric drive).

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Regarding claim 13, Schelhas et al. teach in figures 1, 3, and 4, that the shaft (13) has a flattening, and that the G-rotor (impeller 12) is rotationally fixed to the shaft.

Regarding claim 14, Schulhas teach in figures 1, 3, and 4, that the cover (intake cap 16) has an inlet (intake stub 26), the bottom (intermediate housing 21) has an outlet (pump outlet 28), and that the fluid flows into the inlet and out of the outlet. It is also inherent that the fluid flows axially through the G-rotor (impeller 12), since it is a rotary pump.

Regarding claims 15 and 16, Schelhas et al. teach in figures 1,3, and 4, notably in figure 4, that the cover (intake cap 16) is prestressed against the bottom (intermediate housing 21). In addition, the pump comprises a housing (unit housing 32) that prestresses the cover (intake cap 16) against the bottom (intermediate housing 21). *See specification column 4 - lines 6-10.*

Claim Rejections - 35 USC § 103

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
8. Claims 3, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schelhas et al. (US Pat. No. 6,095,771).

Regarding claims 3 and 10, Schelhas et al. teach in figures 1, 3, and 4, that the spacer (see extended lip of the intermediate housing 21) is manufactured in one piece with the bottom (intermediate housing 21) rather than with the cover (intake cap 16) as claimed. The examiner takes position that such modification involves only a routine skill in the art, and it's a mere design choice, since it neither affects the operation nor the feasibility of the assembly of the pump. Hence, it would have been obvious to the one having ordinary skill in the art at the time the invention was made to have the spacer together with the cover as one piece rather than the bottom. Consequently, it would have been obvious that the spacer together with the cover be arranged on the side of the G-rotor (impeller 12) opposite the electric motor (electric drive).

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Similarly, schelhas et al. teach (regarding claim 12) in figure 3, that the cover has a planar configuration rather than the bottom as claimed. The examiner takes position that such modification involves only a routine skill in the art, and it's a mere design choice, since it neither affects the operation nor the feasibility of the assembly of the pump. Hence, it would have been obvious to the one having ordinary skill in the art at the time the invention was made to have made this modification with the motivation of having the bottom (intermediate housing 21) in a planar configuration rather than the cover (intake cap 16).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Anderson et al. (US Pat. No. 6,454,521) disclose a fuel pump connected to a motor having a casing made from plastic comprising a housing, a cover and a bottom with surface coating, and a spacer in between.

Wolters et al. (US Pat. No. 6,755,610) and Fischer et al. (US Pat. No. 6,402,460) disclose a pump connected to a motor having a casing made from plastic comprising a housing, a cover and a bottom with a surface coating for wear resistance.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lahcen Elaadil whose telephone number is (571) 270-3546. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm (Eastern Time).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Cheng can be reached on 571-272-4433. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joe H Cheng/
Supervisory Patent Examiner, Art Unit 4114

EL
10/31/2007